## State Project No. 0055-0145 Public Information Meeting

Replacement of Bridge No. 04525

Simsbury Road over West Branch Salmon Brook

Granby, CT



Join us for a Question-and-Answer session following the formal presentation.

PROJECT EMAIL: DOT-FLBP@ct.gov

**PHONE:** (860) 594-2020 (voicemail only)

**PROJECT WEBPAGE:** 

https://portal.ct.gov/DOTGranby55-145





## State Project No. 0055-0145

Replacement of Bridge No. 04525, Simsbury Road over West Branch Salmon Brook, Granby, CT., Public Information Meeting

#### **Meeting Overview**

- Housekeeping Project Team and meeting interaction
- Formal Presentation of Design
  - Explain existing conditions
  - Define Purpose and Need
  - Proposed replacement
- Question and Answer (Q&A) Session



## Title VI – Your Civil Rights

No Person shall, on the basis of race, color or national origin, be excluded from participation or subject to discrimination in the development of this project.

- Voluntary Post-Meeting Survey:
  - https://portal.ct.gov/ctdotsurvey



- Civil Rights information:
  - https://portal.ct.gov/DOT/Business/Office-of-Equity/Title-VI-Page

A recording of this presentation will be posted to YouTube after the event.

Closed captioning—including non-English translation options—are available on Zoom and YouTube.





Individuals and organizations may file a complaint by completing the Title VI complaint form (https://highways.dot.gov/civil-rights/title-vi-complaint). Complaints should be signed and include contact information and should be sent to: Office of Civil Rights Federal Highway Administration 1200 New Jersey Avenue, Washington, DC 20590



## Connecticut Department of Transportation Title VI Notice to the Public

The Connecticut Department of Transportation (CTDOT) operates its programs and services without regard to race, color, and national origin in accordance with Title VI of the Civil Rights Act. Any person who believes she or he has been aggrieved by any unlawful discriminatory practice under Title VI may file a complaint with the CTDOT.

For more information on the CTDOT's civil rights program, and the procedures to file a complaint, contact the CTDOT Title VI Coordinator at (860) 594-2169, TRS 711; <a href="mailto:Debra.Goss@ct.gov">Debra.Goss@ct.gov</a>; or visit our administrative office at 2800 Berlin Turnpike, Newington, CT 06131. For more information, visit <a href="mailto:www.ct.gov/dot">www.ct.gov/dot</a>

A complainant may file a complaint directly with the Federal Transit Administration by filing a complaint with the FTA Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5<sup>th</sup> Floor-TCR, 1200 New Jersey Ave., SE, Washington, DC 20590

A complainant may file a complaint directly with the Federal Highway Administration by filing a complaint with the FHWA Office of Civil Rights, Attention: Title VI Program Coordinator, 8<sup>th</sup> Floor E81-105, 1200 New Jersey Ave., SE, Washington, DE 20590

#### 如需更多信息或免费语言协助,请致电(860)594-2109

Para información adicional, o asistencia lingüística gratuita, por favor llame al (860) 594-2109
Per informazioni aggiuntive o assistenza linguistica gratuita, chiamare il numero (860) 594-2109
Para obter mais informações, ou para auxílio gratuito em outro idioma, ligue para (860) 594-2109
Aby uzyskać dodatkowe informacje lub bezpłatną pomoc tłumacza, proszę dzwonić pod numer (860) 594-2109
Для получения подробной информации или бесплатных услуг перевода звоните по телефону (860) 594-2109
Pou jwenn plis enfòmasyon, oswa asistans ak lang gratis, ranpri rele (860) 594-2109
Pou jwenn plis enfòmasyon, oswa asistans ak lang gratis, ranpri rele (860) 594-2109
Si vous souhaitez en savoir plus ou bénéficier d'une assistance linguistique gratuite, merci de composer le numéro suivant (860) 594-2109
अधिक जानकारी या निःशुल्क भाषा संबंधी सहायता के लिए कृषया (860) 594-2109 पर कॉल करें।

추가 정보가 필요하거나 무료 언어 지원이 필요하시면 (860) 594-2109로 전화주십시오

Để có thêm thông tin hoặc hỗ trợ ngôn ngữ miễn phí, vui lòng gọi (860) 594-2109







#### Departamento de Transporte de Connecticut

#### Título VI Aviso al Público

- El Departamento de Transporte de Connecticut (CTDOT) se compromete a asegurar que ninguna persona sea excluida de participar en, o le sean negados los beneficios de, sus servicios de transporte basándose en la raza, color o país de origen de la persona protegida por el Título VI de la Ley de los Derechos Civiles. Si a usted le parece que ha sido objeto de discriminación en lo que corresponde al Titulo VI, puede presentar una queja al CTDOT.
- Para más información sobre el programa de derechos civiles del CTDOT y el proceso de presentar una queja, comuníquese con el Coordinadora del Título VI del CTDOT al teléfono (860) 594-2169, TRS 711; Debra.Goss@ct.gov. Tambien puede visitar nuestra oficina administrativa en 2800 Berlin Turnpike, Newington, CT 06131. Para más información, visite www.ct.gov/dot.
- Un denunciante puede presentar una queja directamente ante la Federal Transit Administration si lo hace ante la FTA Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Ave., SE, Washington, DC 20590.
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- Para recibir más información o ayuda gratuita en otros idiomas, llame al (860) 594-2109.

#### **Funding for Project**

#### Federal Local Bridge Program – "Design Managed by State" (DMS)

<u>Traditional Fed. Local Program</u>: 80% Federal and 20% Town for Design, ROW, and CN

**DMS**: Design, ROW, and CN Phases are funded with 80% Federal and 20% State Funds

- Design, ROW, and CN Phases are at zero cost to the Town
- Design is "Full Partnership" and Coordination with the Town

#### **Goals of DMS:**

- Provide a "Streamlined approach to Design" using full DOT resources
- Aid the Towns to Keep their bridges in "State of Good Repair" by effective use of funds
- Decrease typical design time
- Utilize Accelerated Bridge Construction (ABC) techniques to shorten construction duration
- Increase the number of municipal projects delivered to construction each year



## **Project Team**



Bart Sweeney, P.E.

Division Chief of Bridges

**CTDOT** 



Derick Lessard, P.E.

Principal Engineer

**CTDOT** 



Marc Byrnes, P.E.

Supervising Engineer

**CTDOT** 



Jeffrey Organek, P.E.

Project Engineer

**CTDOT** 



**Zachary Guarino** 

Right-of-Way Project Coordinator

**CTDOT** 



#### **Project Team**



Anand Seshadri, P.E.

CLE Team Leader

CHA Consulting



John A. Wengell
CLE Project Manager
CHA Consulting



Benjamin Szymanski, P.E. Project Manager WSP



Jessica Venuti, P.E.

Bridge Lead

WSP



James Hund
Roadway Lead
WSP



## Welcoming Remarks from the Town of Granby



Kirk A. Severance
Town of Granby

Director of Public Works

Phone: (860) 653-8960

kseverance@granby-ct.gov





## **Bridge Structural Elements**

## Bridge Condition Ratings

Scale: 1 to 9

9 - Excellent

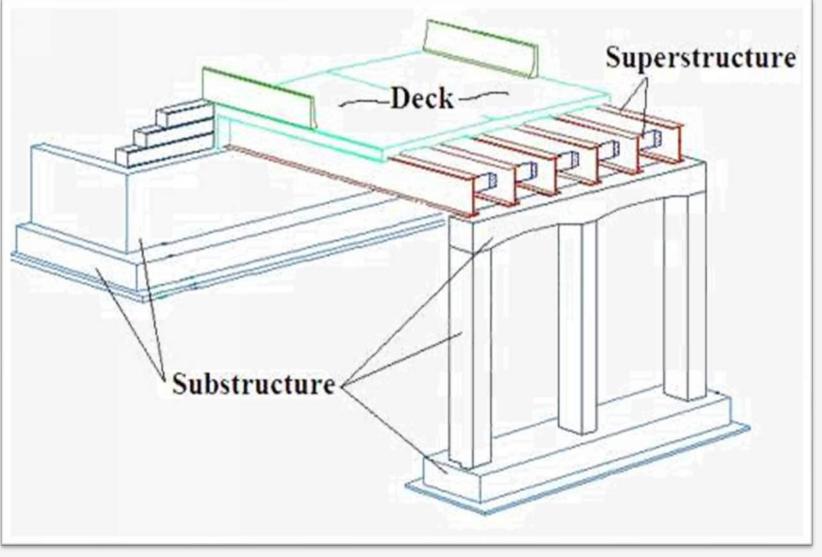
8 – Very Good 7 – Good

6 – Satisfactory 5 – Fair

4 – Poor

3 – Serious

2 – Critical 1 – Imminent Failure





#### **Examples of Concrete Deterioration**







**Efflorescence** 

Honeycombing

Scaling







**Spalling** 

Replacement of Bridge No. 04525 // State Project No. 0055-0145

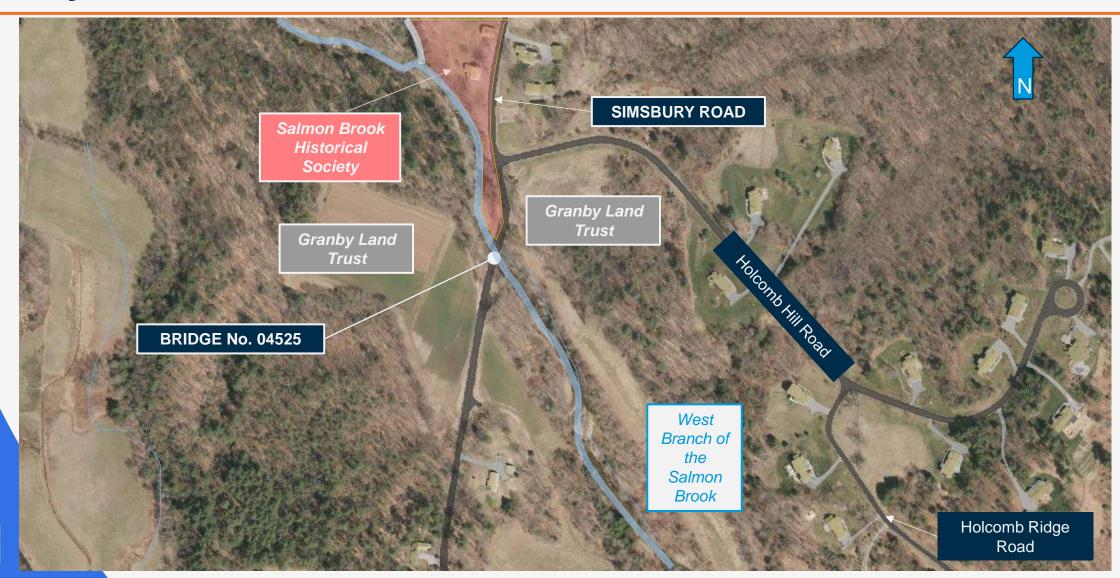




# State Project Number 0055-0145

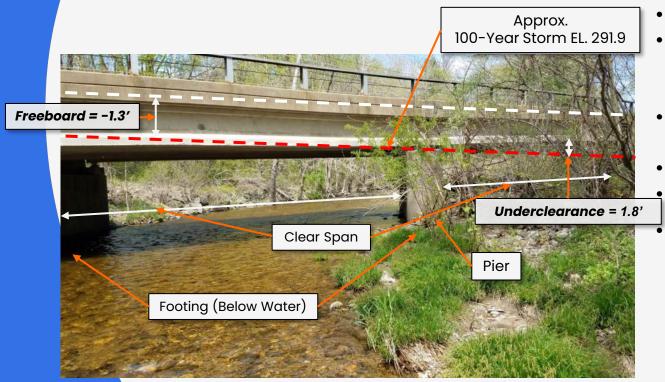
Replacement of Bridge No. 04525 in Granby

## **Project Location**





#### Bridge No. 04525 Information



- Built in 1956
- Span Length: 2 Spans, each 50'-10", total length = 111'
- Superstructure Five Prestressed Concrete I-Beam with a Reinforced Concrete Deck and Bituminous Concrete Wearing Surface
- Substructure Reinforced Concrete Abutments and Wingwalls
- Roadway Width = 22'-0"
   Average Daily Traffic = 1,300 vehicles per day (2022)

Hydraulics: (100-Yr Design Storm)

- 15.8 square mile watershed
- 71'-0" Hydraulic Clear Span > 68'-0" = 1.2 \* BFW
- 2.4' Backwater > 1.0' Max
- 1.8' Underclearance < 2.0' Min</li>
- -1.3' Freeboard < 1.0' Min</li>
- Scour Analysis:
  - Bridge Foundation is stable for calculated Scour Conditions



## **Existing Bridge Condition Ratings**

## BRIDGE INSPECTION REPORT RATING SUMMARY (Routine Inspection Report: 11/15/2023)

ITEM	CONDITION	RATING
Deck	Fair	5
Overlay (Bit. Concrete)	Good	7
Deck (Struct. Cond.)	Fair	5
Railing	Good	7
Parapet	Good	7
Expansion Joints	N/A	N/A
Superstructure	Good	7
Bearings	Poor	4
Girders	Good	7
Rust	Good	7
Welds - Cracks	N/A	N/A

## BRIDGE INSPECTION REPORT RATING SUMMARY (Routine Inspection Report: 11/15/2023)

ITEM	CONDITION	RATING
Substructure	Fair	5
Abutments – Stem	Fair	5
Backwall	Good	7
Footings	N/A	N/A
Wingwalls	Good	7
Piers	Fair	5
Erosion - Scour	Fair	5
Approach	Good	7
Guide Rail	Satisfactory	6
Pavement (Bit. Concrete)	Good	7
Embankment	Good	7
Channel and Channel Protection	Fair	5
Channel - Scour	Fair	5
Embankment - Erosion	Good	7
Deck Geometry	Intolerable	3

#### STRUCTURAL ELVALUATION = 4

Meets minimum tolerable limits to be left in place as is



## **Existing Load Rating**

- CTDOT Load Rating dated February 12, 2021
- Inventory HL-93 Rating = 0.54 < 1.00 (Substandard)</li>
- Operating HL-93 Rating = 0.71 < 1.00 (Substandard)</li>
- AASHTO and CT Legal Load Ratings < 1.00</li>

Bridge may require weight restrictions



## **Existing Site Photos**



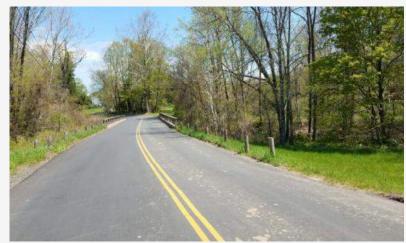
West (Upstream) Elevation



North Approach – looking South



East (Downstream) Elevation



South Approach - looking north



## **Existing Site Photos**



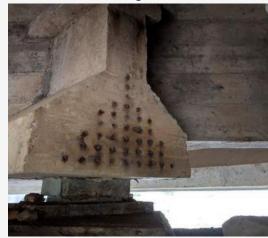
Condition of Overlay & Bridge Rail



Longitudinal cracks with efflorescence in underside of deck between beams.



**Underside of Superstructure** 



**Exposed and rusted prestressing strands** 



## **Existing Site Photos**



**Condition of South Abutment** 



**Upstream Channel from Bridge** 



Spall in concrete bearing pad



**Deposition under Span 2** 



#### **Project Purpose & Need**

- Eliminate substandard Load Rating Capacity and potential weight restrictions
- Age of the Bridge is 69 years (1956 construction); Bridge is nearing the end of its service life.
  - Exposed and rusted prestressing strands in beams
  - Substructure has deteriorated concrete
- Roadway Deficiencies:
  - 22' Existing Bridge Width vs. 24'-0" Minimum (FHWA & State)
  - Existing Roadway Radius 195' vs. 510' Radius (FHWA & State)
  - Existing Southbound SSD 95' vs. 203' (Proposed): (305' FHWA & State)
  - Existing Northbound SSD 194' vs. 327' (Proposed): (305' FHWA & State)
- Bridge & approach rail systems do not meet current safety standards

#### PROPOSED REHABILITATION

Full Bridge Replacement

**Note:** Despite deficiencies, the bridge is safe for the traveling public and is inspected by CTDOT.



#### **Proposed Improvements**

#### **NEW SINGLE SPAN STEEL BEAM BRIDGE**

- o 105'-0" Single Span Bridge with reinforced concrete deck and bituminous overlay
- o Reinforced Concrete Abutments and Wingwalls founded on bedrock or pile foundation
- o Carry AASHTO Design, Legal & Permit Vehicles
- o 75-year Service Life & Minimal Maintenance
- o 30'-wide Roadway including two 10'-0" travel lanes and two 5'-0" shoulders
- Roadway Geometry Improved radius to meet standards
- o Improved Stopping Sight Distance (SSD)
- o Open Bridge Rail & Approach Rail System Meeting Standards



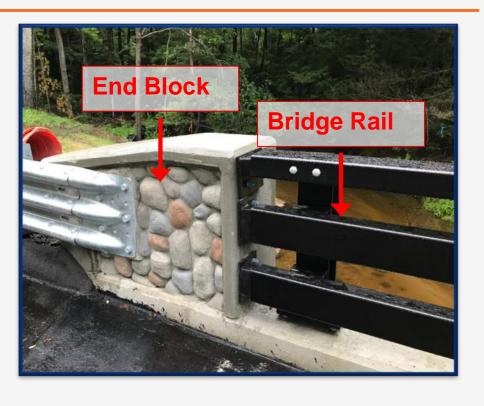


## **Proposed Improvements**

#### **Improve Aesthetics**

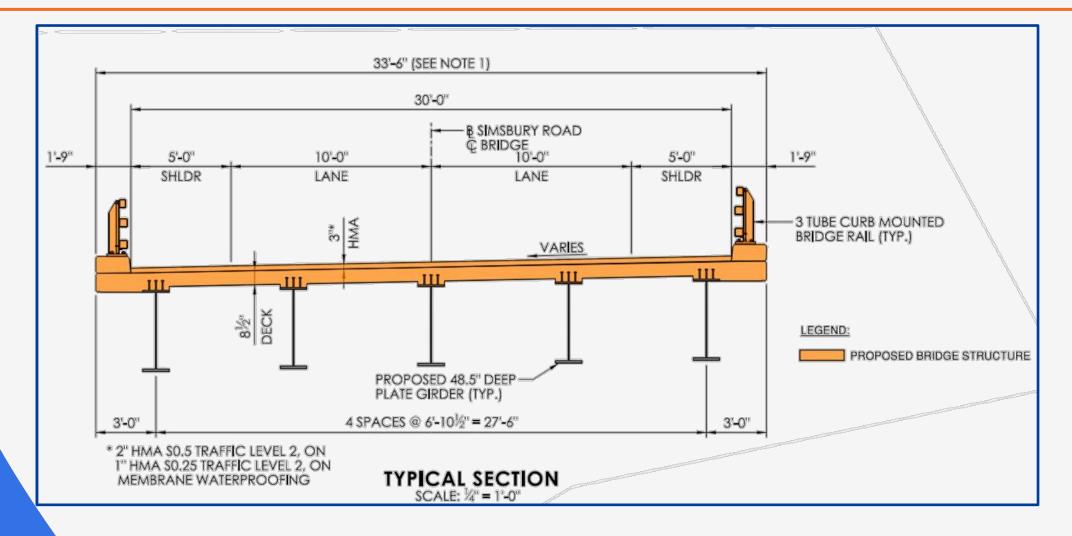
- Form Liner Applied To Concrete Simulating Stones (End Blocks and Wingwalls)
- Metalized Bridge Rail to Town's Color Choice





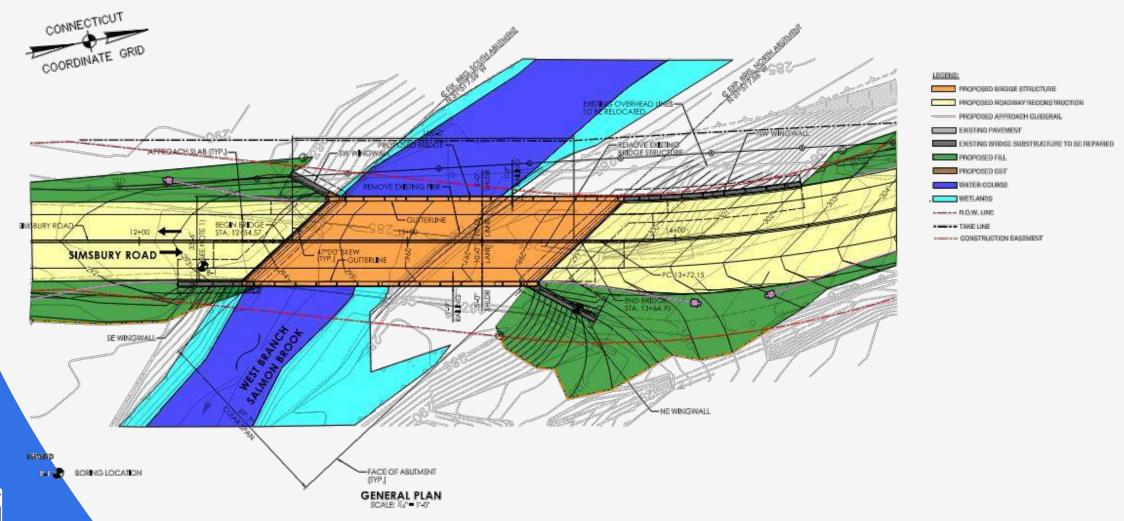


#### **Proposed - Cross Section**



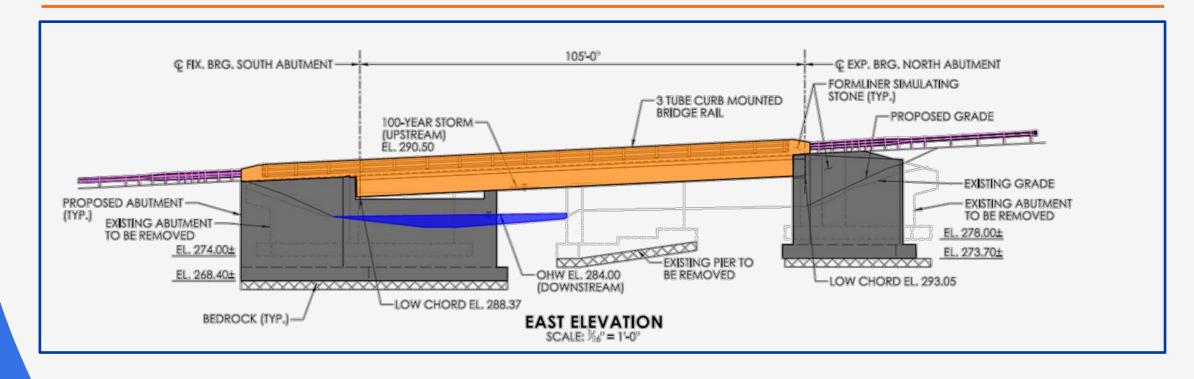


## Proposed - Bridge Plan





#### Proposed – Bridge Elevation

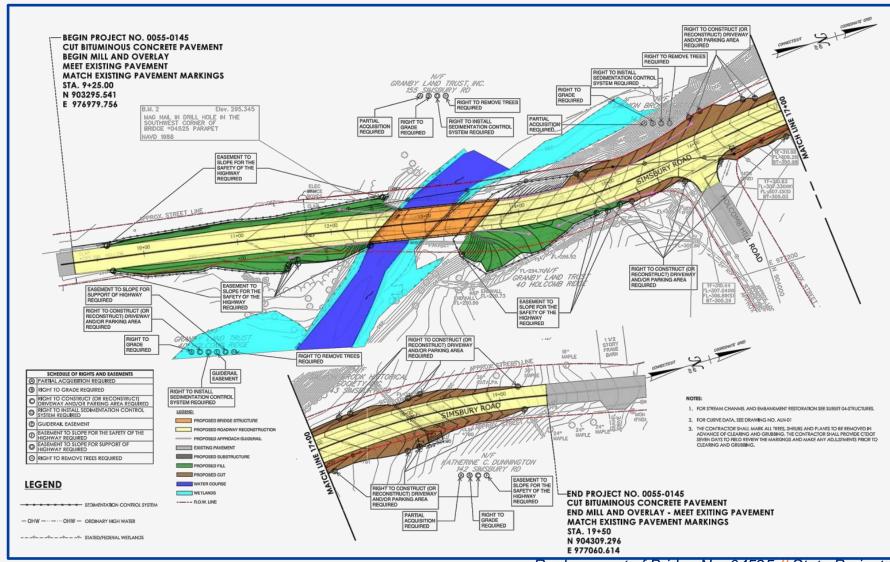


#### 100-YR Storm

3.5' Underclearance (U/S Max.)
-0.8' Underclearance (U/S Min.)
0.4' Freeboard
0.7' Backwater Elevation

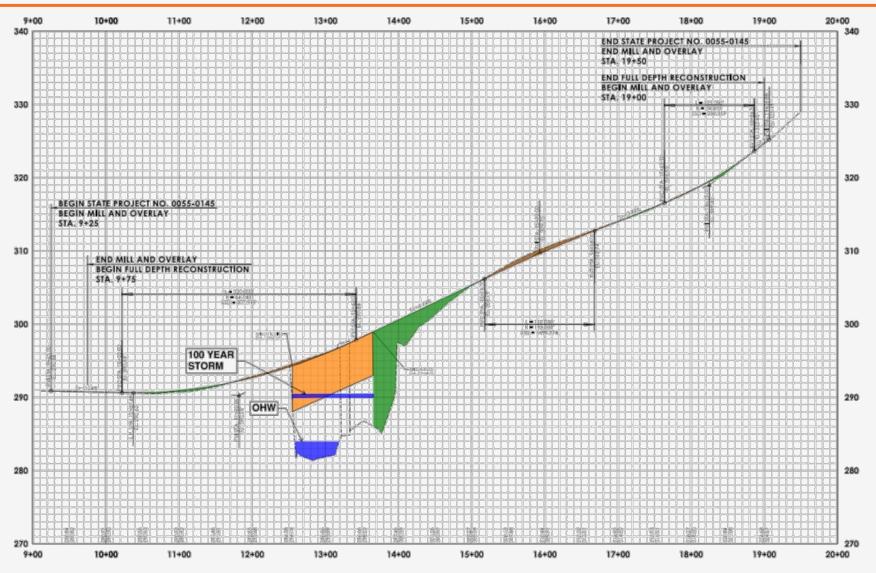


## Proposed – Roadway Plan & Right of Way Impacts



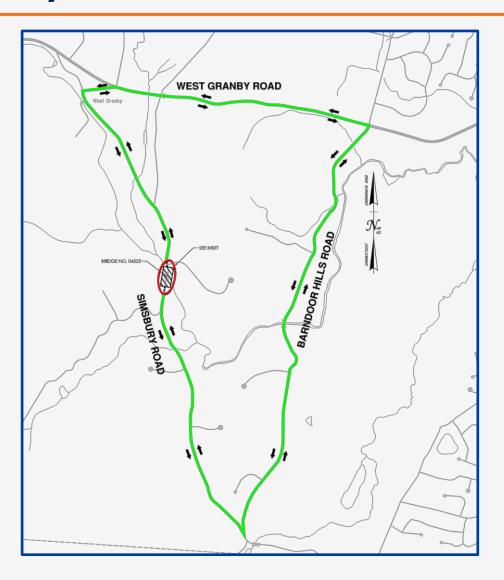


## Proposed – Roadway Profile





## Proposed - Roadway Detour





## Utility, Environmental and Historical Impacts

#### ■ Utility Impacts:

 Overhead utilities located west of the existing bridge to be temporarily or permanently relocated and maintained throughout construction

#### ■ Environmental Impacts:

- Tree clearing along roadway
- Temporary & Permanent Wetland Impacts
- Minimal work in Waterway
- Best-Management Practices for Fish & Wildlife

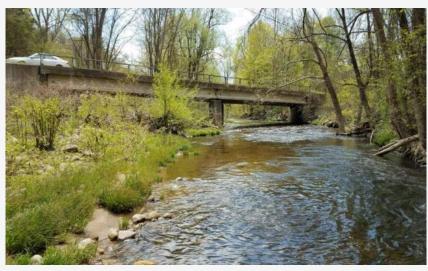
#### ☐ Historical Impacts:

No Historical Impacts Anticipated

#### □ Anticipated Permits:

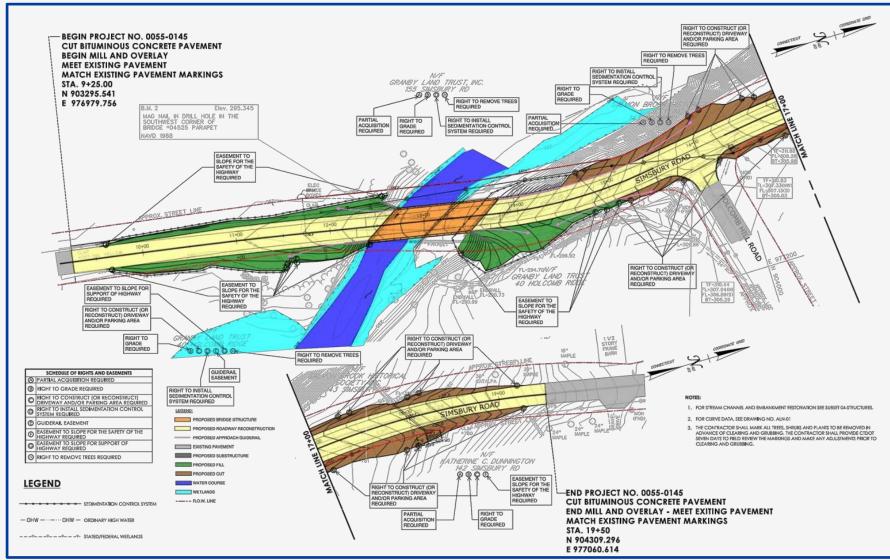
- Town of Granby Inland Wetland Permit
- CTDOT FMC- MOU
- US Army Corps of Engineers Self Verification







#### Proposed – Right of Way Impacts





## Right-of-Way Relevant Law

#### **State of Connecticut**

C.G.S. Sections 13a-73 & 13a-98e

#### **Federal**

 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.





#### Right-of-Way Acquisition Process

Letter of Intent to Acquire

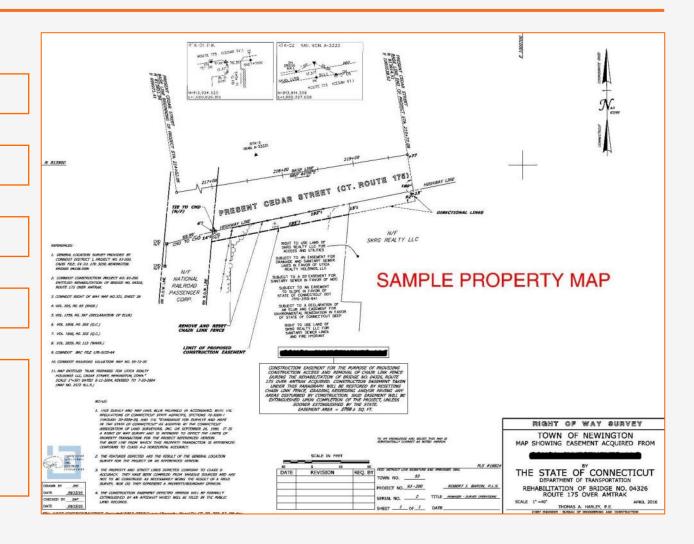
Valuation

Offer of Just Compensation

Negotiation

#### Acquisition

- Agreement
- Eminent Domain/Condemnation
- 6-month Appeal Period





#### **Project Schedule & Construction Cost**

#### □ Schedule

- Construction Start: Spring 2027 (subject to ROW and permit approvals)
- Construction Duration: 1 Season (8 Months)
- ☐ Construction Cost: \$7,300,000
  - 80% Federal Funds & 20% State Funds
  - No Cost to the Town of Granby

Note: The cost and schedule are preliminary and are subject to change



#### **Question & Answer Session**



By Email: <a href="mailto:DOT-FLBP@ct.gov">DOT-FLBP@ct.gov</a>



By Phone: (860) 594-2020 (voicemail)



Project Webpage: https://portal.ct.gov/DOTGranby55-145

Note: Comment period is open through April 24, 2025

\*The public can submit comments and questions during two-week public comment period following meeting. Direct comments and questions by April 24, 2025, to Jeffrey Organek, Project Engineer, by email at <a href="mailto:Jeffrey.Organek@ct.gov">Jeffrey.Organek@ct.gov</a> or by phone at (860) 594-3582.





## **Thank You!**